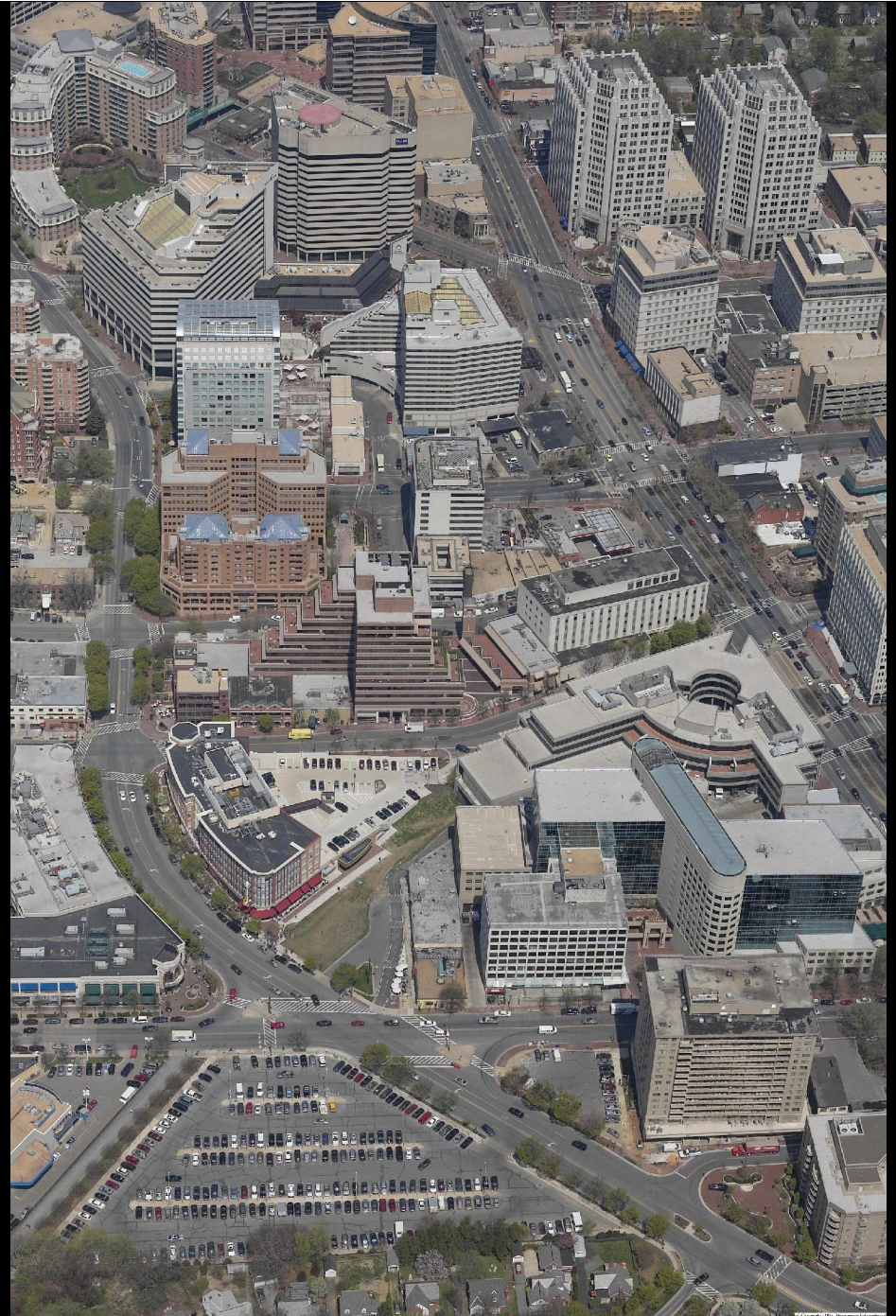


Land Use and Transportation



Key Factors in Understanding Land Use and Transportation (Checks & Balances)

- Mobility vs. Accessibility
- Urban Economics
- Comprehensive Planning / Zoning
- Urban Design

Performance Measures: Change Perspective

Mobility:

Ability to move between point A and point B

Accessibility

Number of opportunities, also called activity sites, available within a certain distance or travel time

#10 WEST MONTGOMERY AVE @ RESEARCH BLVD / CROFTON HILL LN

CAPACITY: 1500

CYCLE CHARACTERISTICS:

SPLIT PHASE (N/S)

120 SEC

4 PHASES

$$5 + 2 + 252 = 259$$

$$259 * 0.4 = \mathbf{104}$$

$$1486 - 104 = 1382$$

$$(1382 * 1) + (69 * 1.1) = \mathbf{1458}$$

$$(1825 * 0.36) = 657$$

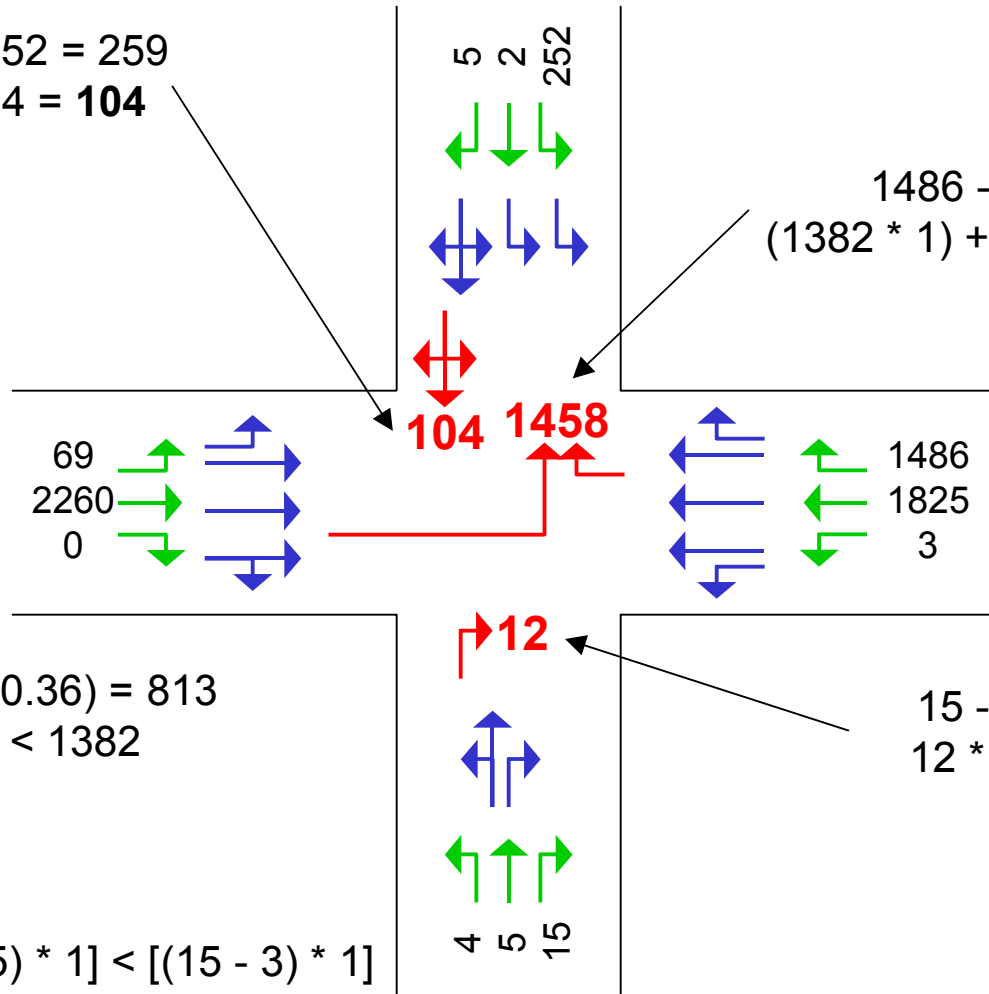
$$657 < 1382$$

$$(2260 * 0.36) = 813$$

$$813 < 1382$$

$$[(4 + 5) * 1] < [(15 - 3) * 1]$$

$$9 < 12$$



ROADWAY LEVEL OF SERVICE (LOS)



LOS A

LOS B



LOS C



LOS D



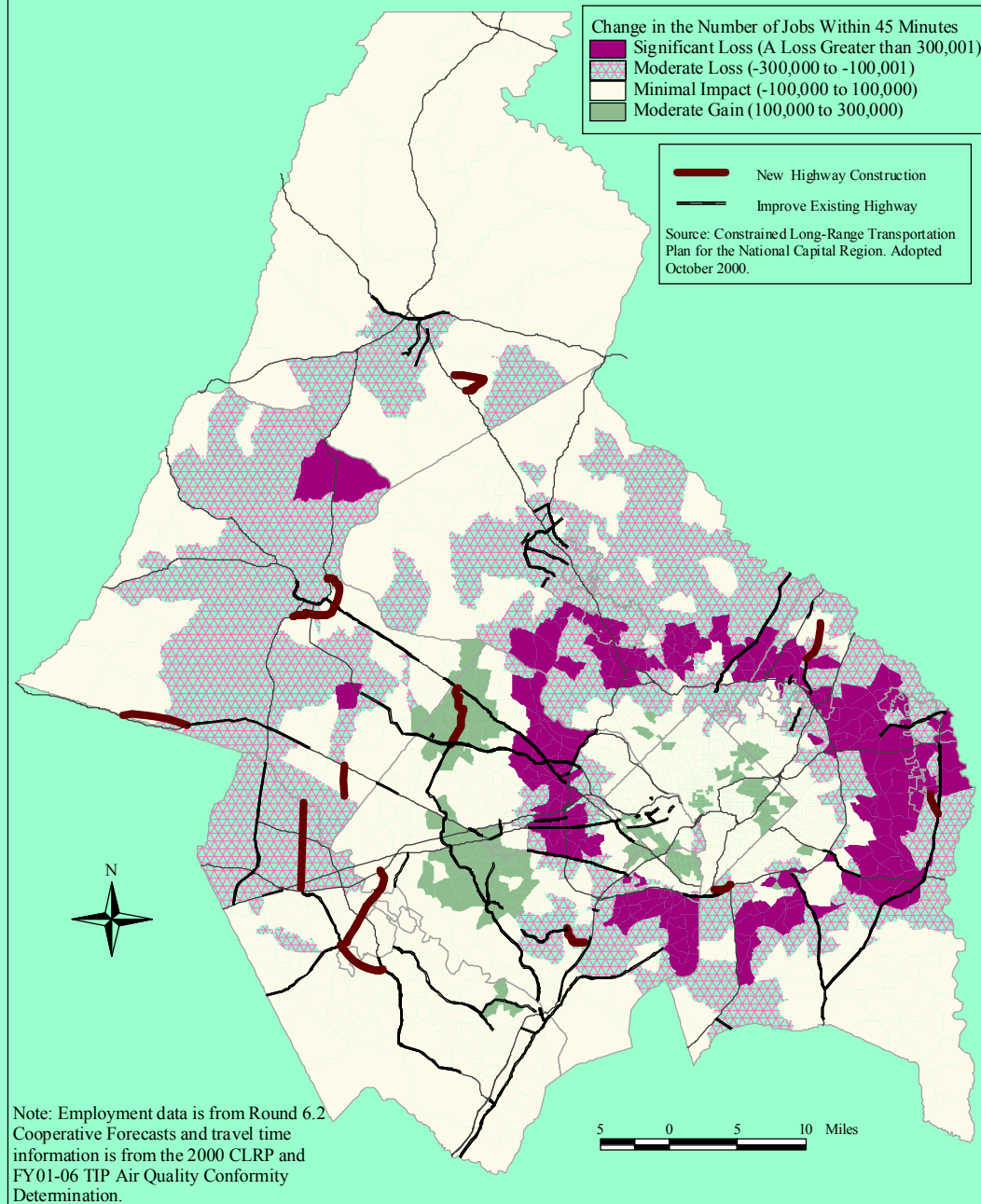
LOS E



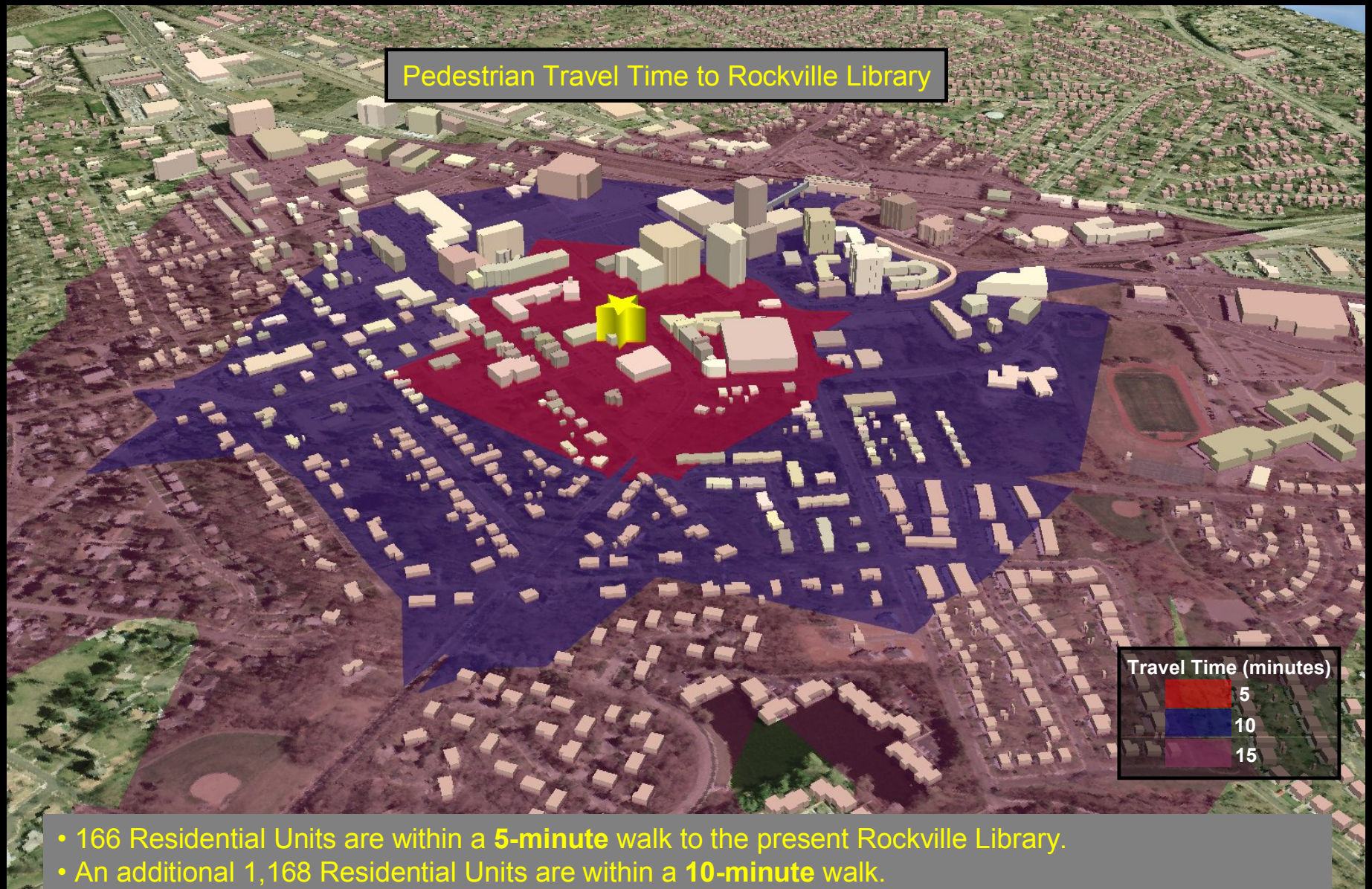
LOS F!



Figure 5-8
Change in Accessibility to Jobs by Auto Within 45 Minutes
2001 - 2025



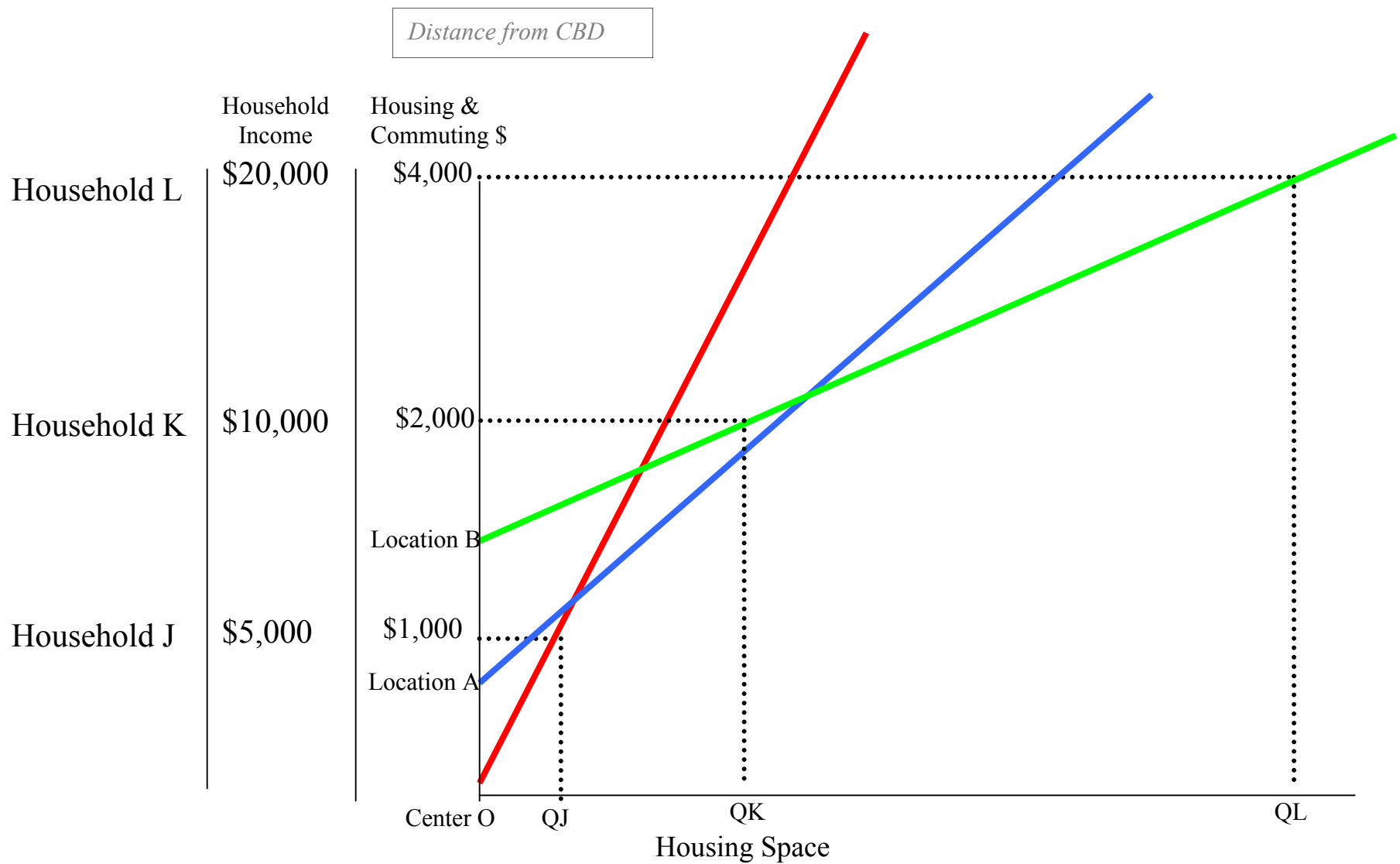
Pedestrian Travel Time to Rockville Library



- 166 Residential Units are within a **5-minute** walk to the present Rockville Library.
- An additional 1,168 Residential Units are within a **10-minute** walk.
- An additional 2,240 Residential Units are within a **15-minute** walk.
- The rate of density increases outward from the 5 minute ring, with greater density in the 10 and 15-minute rings.

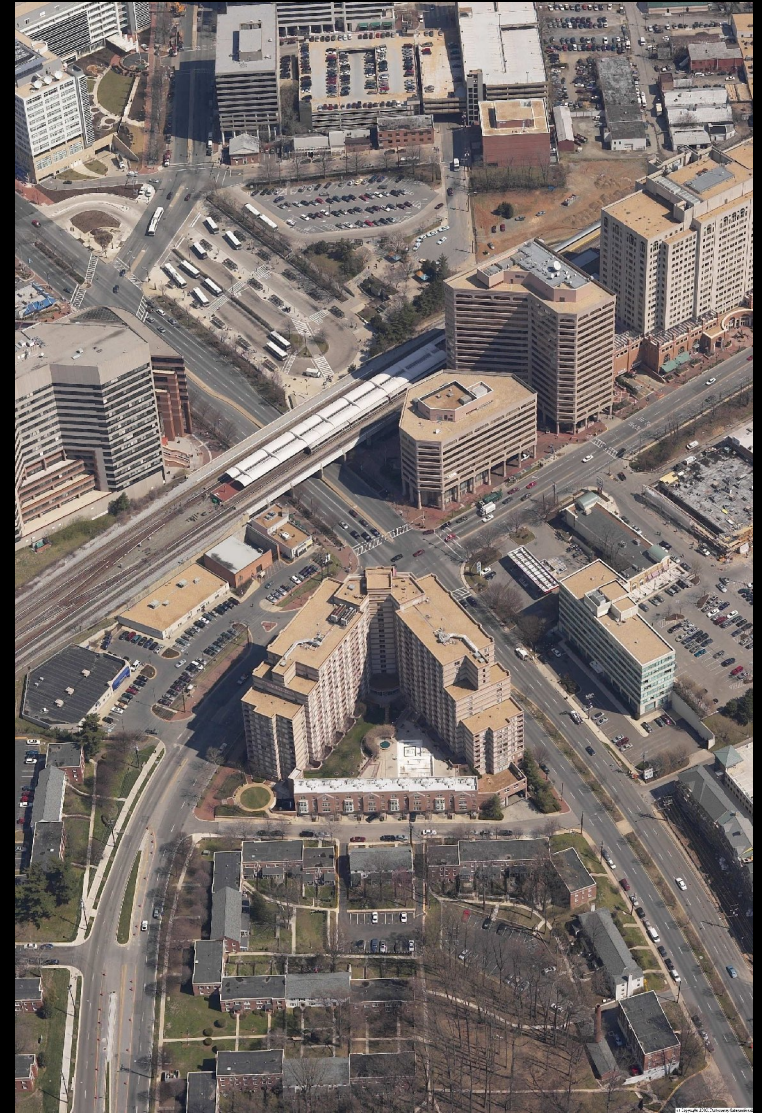
Key Factors in Understanding Land Use and Transportation

- Urban Economics



Income, Commuting Cost, Housing Consumption, & Location Choice

- Why are there high rise buildings in urban cores?
- Why aren't there high rises in rural areas?

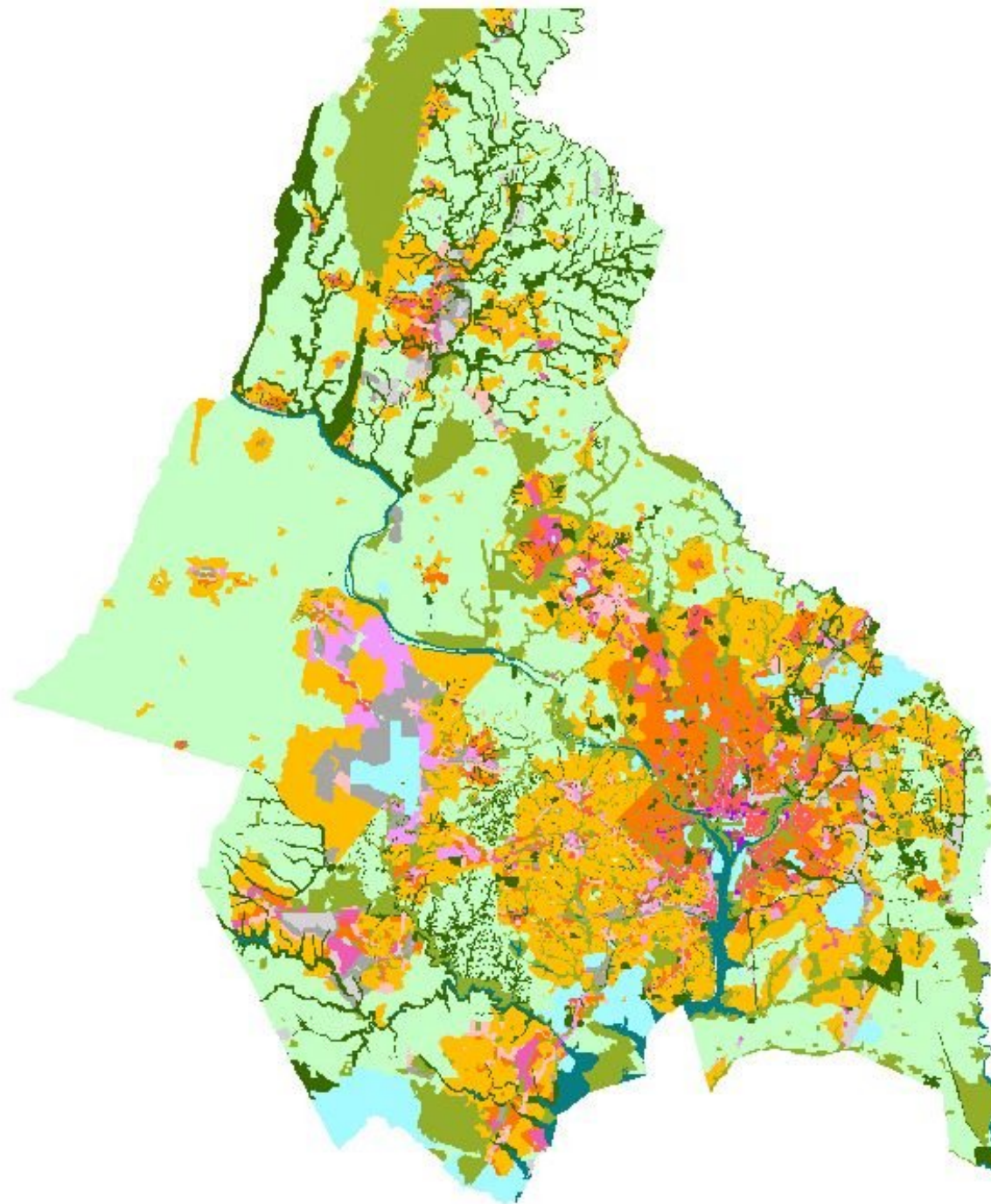


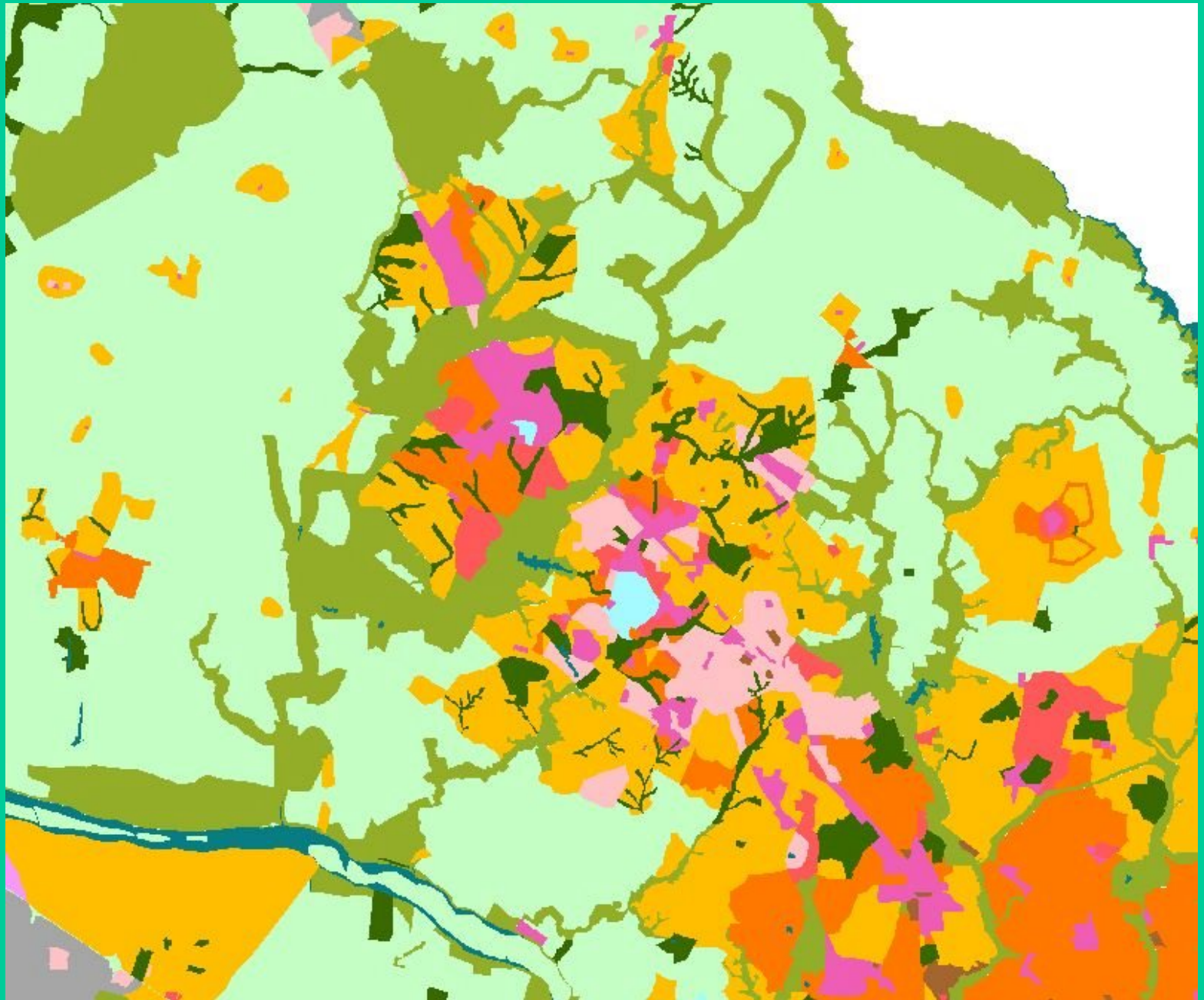
- What makes Pittsburgh special, but Wheeling of low value?
- Why is Tysons Corner such a hot commercial center?

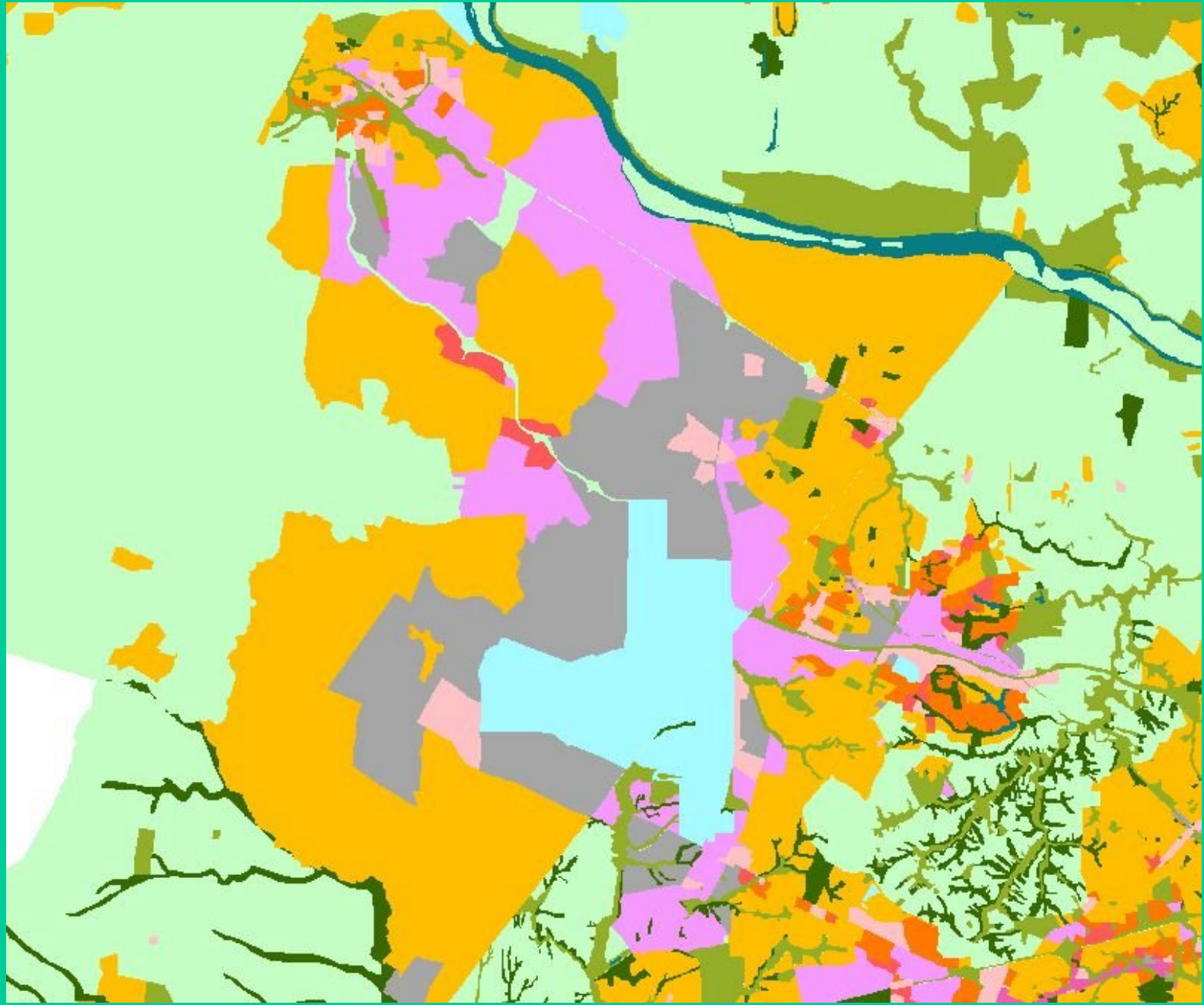


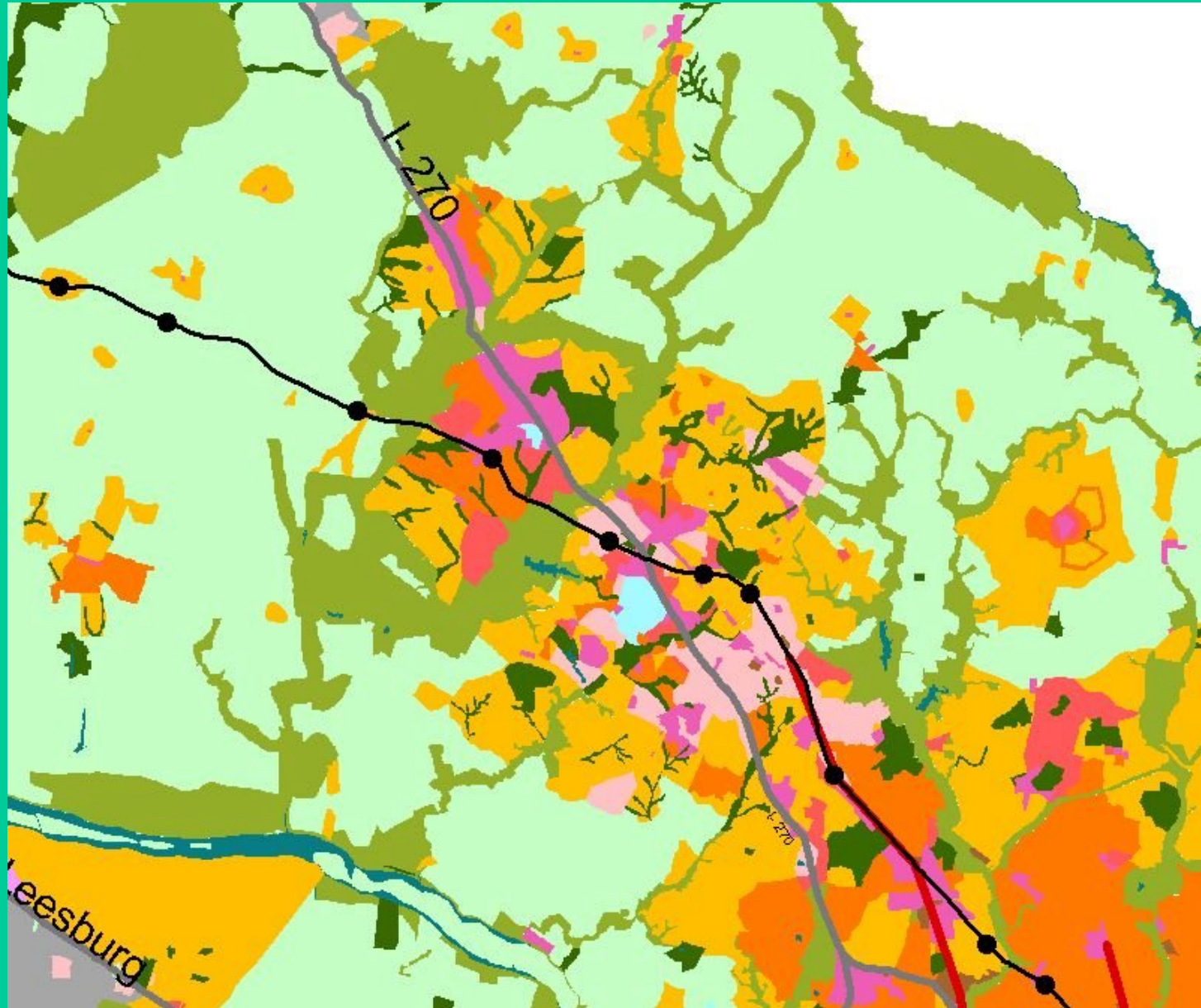
Key Factors in Understanding Land Use and Transportation

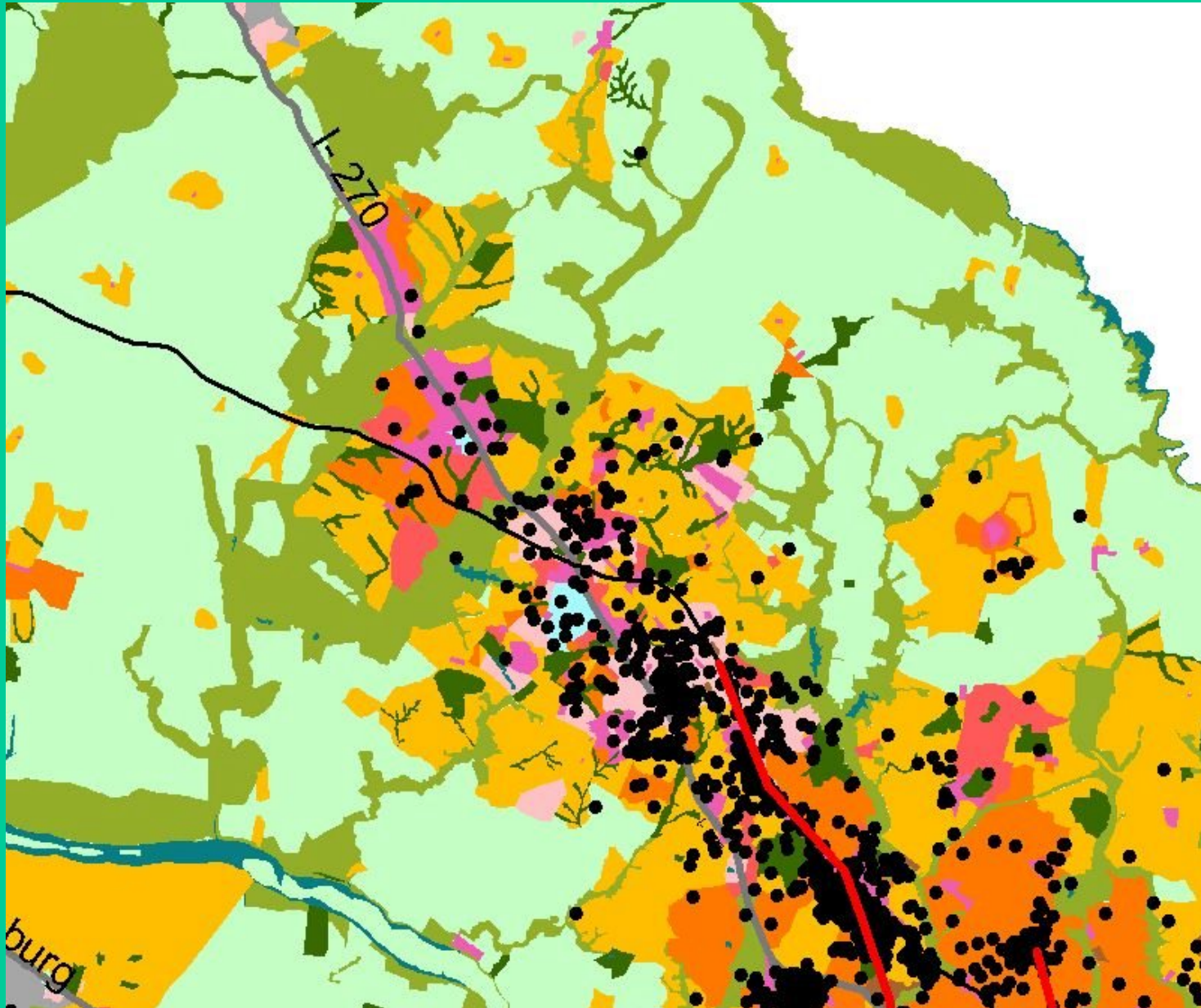
- Comprehensive Planning / Zoning











Key Factors in Understanding Land Use and Transportation

- Urban Design

Tysons Corner has density, but not the urban design



Site Organization

Building Placement

Buildings parallel to street and at consistent set back provide well-defined edge

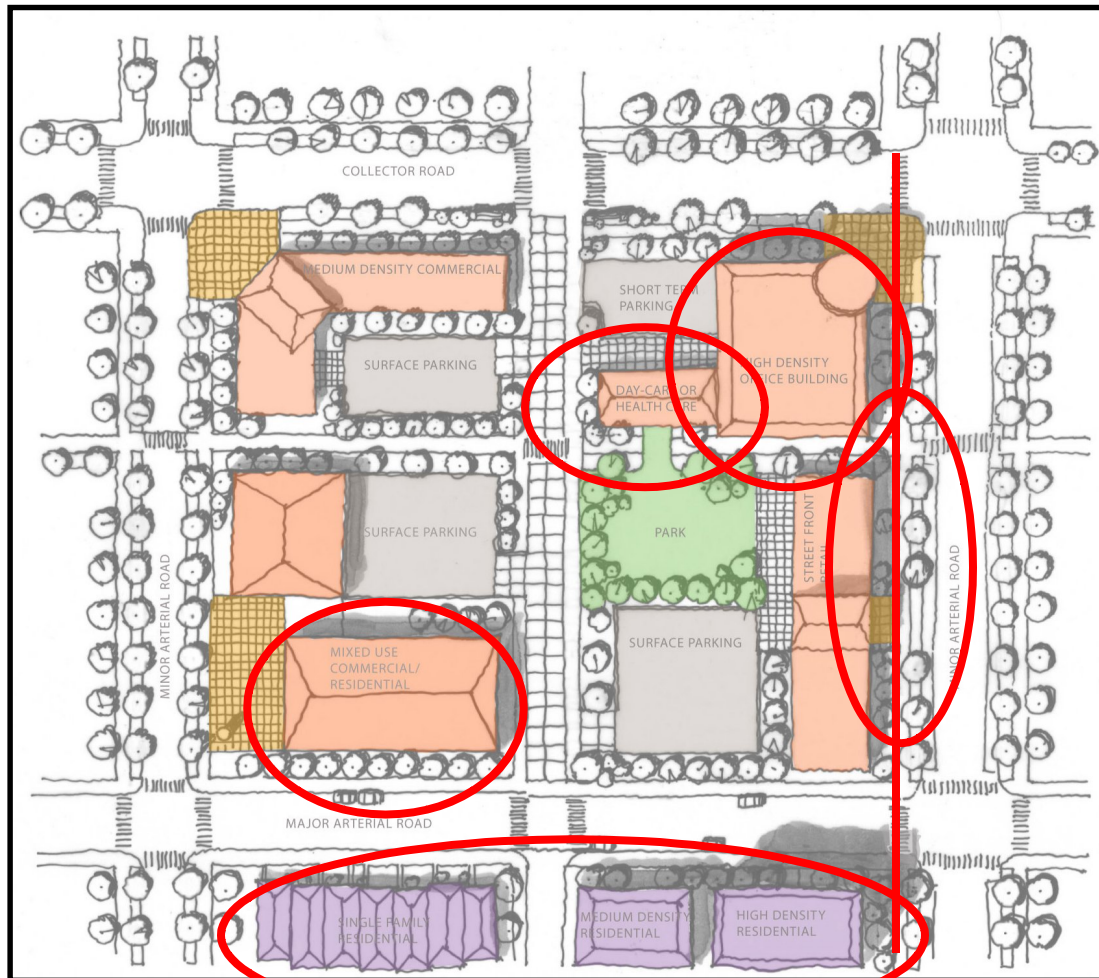
Street front uses animate sidewalk

Ancillary uses located closest to potential users

Highest density uses located close to intersections

Mixed-use development provides transition from commercial to residential

Nearby residential uses allow people to live near work



Key Factors in Understanding Land Use and Transportation (Checks & Balances)

- Mobility vs. Accessibility
- Urban Economics
- Comprehensive Planning / Zoning
- Urban Design